

ROLL STABILITY CONTROL SYSTEM FOR AN AUTOMOTIVE VEHICLE USING AN EXTERNAL ENVIRONMENTAL SENSING SYSTEM

Abstract

A roll stability control system (18) for an automotive vehicle (10) includes an external environment sensing system, such as a camera-based vision system, or a radar, lidar or sonar-based sensing system (43) that generates image, radar, lidar, and/or sonar-based signals. A controller (26) is coupled to the sensing system and generates dynamic vehicle characteristic signals in response to the image, radar, lidar, or sonar-based signals. The controller controls the rollover control system (18) in response to the dynamic vehicle control signal. The dynamic vehicle characteristics may include roll related angles, angular rates, and various vehicle velocities.